the Component shall provide information to the appropriate regulators and stakeholders documenting the reasons for the sequencing change, and shall request their review and comment on that decision.

- (h) Ensure that information provided by regulators and stakeholders that may influence the priority assigned to an MRS or sequencing decision concerning an MRS is included in the Administrative Record and the Information Repository.
- (i) Review each MRS priority at least annually and update the priority as necessary to reflect new information. Reapplication of the rule is required under any of the following circumstances:
- (1) Upon completion of a response action that changes site conditions in a manner that could affect the evaluation under this rule.
- (2) To update or validate a previous evaluation at an MRS when new information is available.
- (3) To update or validate the priority assigned where that priority has been previously assigned based on evaluation of only one or two of the three hazard evaluation modules.
- (4) Upon further delineation and characterization of an MRA into MRSs.
- (5) To categorize any MRS previously classified as "evaluation pending."

## §179.6 Procedures.

The rule in this part comprises the following three hazard evaluation modules

- (a) Explosive Hazard Evaluation (EHE) module.
- (1) The EHE module provides a single, consistent, Department-wide approach for the evaluation of explosive hazards. This module is used when there is a known or suspected presence of an explosive hazard. The EHE module is composed of three factors, each of which has two to four data elements that are intended to assess the specific conditions at an MRS. These factors are:
- (i) Explosive hazard, which has the data elements Munitions Type and Source of Hazard and constitutes 40 percent of the EHE module score. (See appendix A to this part, tables 1 and 2.)

- (ii) Accessibility, which has the data elements Location of Munitions, Ease of Access, and Status of Property and constitutes 40 percent of the EHE module score. (See appendix A, tables 3, 4, and 5)
- (iii) Receptors, which has the data elements *Population Density*, *Population Near Hazard*, *Types of Activities/Structures*, and *Ecological and/or Cultural Resources* and constitutes 20 percent of the EHE module score. (See appendix A, tables 6, 7, 8, and 9.)
- (2) Based on MRS-specific information, each data element is assigned a numeric score, and the sum of these score is the EHE module score. The EHE module score results in an MRS being placed into one of the following ratings. (See appendix A, table 10.)
- (i) EHE Rating A (Highest) is assigned to MRSs with an EHE module score from 92 to 100.
- (ii) EHE Rating B is assigned to MRSs with an EHE module score from 82 to 91
- (iii) EHE Rating C is assigned to MRSs with an EHE module score from 71 to 81.
- (iv)  $\it EHE\ Rating\ D$  is assigned to MRSs with an EHE module score from 60 to 70.
- (v) EHE Rating E is assigned to MRSs with an EHE module score from 48 to 59.
- (vi) EHE Rating F is assigned to MRSs with an EHE module score from 38 to 47.
- (vii) EHE Rating G (Lowest) is assigned to MRSs with an EHE module score less than 38.
- (3) There are also three other possible outcomes for the EHE module:
- (i) Evaluation pending. This category is used when there are known or suspected UXO or DMM, but sufficient information is not available to populate the nine data elements of the EHE module.
- (ii) No longer required. This category is reserved for MRSs that no longer require an assigned priority because the Department has conducted a response, all objectives set out in the decision document for the MRS have been achieved, and no further action, except for long-term management and recurring reviews, is required.

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- (iii) No known or suspected explosive hazard. This category is reserved for MRSs that do not require evaluation under the EHE module.
- (4) The EHE module rating shall be considered with the CHE and HHE module ratings to determine the MRS priority.
- (5) MRSs lacking information for determining an EHE module rating shall be programmed for additional study and evaluated as soon as sufficient data are available. Until an EHE module rating is assessed, MRSs shall be rated as "evaluation pending" for the EHE module.
- (b) Chemical Warfare Materiel Hazard Evaluation (CHE) module. (1) The CHE module provides an evaluation of the chemical hazards associated with the physiological effects of CWM. The CHE module is used only when CWM are known or suspected of being present at an MRS. Like the EHE module, the CHE module has three factors, each of which has two to four data elements that are intended to assess the conditions at an MRS.
- (i) CWM hazard, which has the data elements CWM Configuration and Sources of CWM and constitutes 40 percent of the CHE score. (See appendix A to this part, tables 11 and 12.)
- (ii) Accessibility, which focuses on the potential for receptors to encounter the CWM known or suspected to be present on an MRS. This factor consists of three data elements, Location of CWM, Ease of Access, and Status of Property, and constitutes 40 percent of the CHE score. (See appendix A, tables 13, 14, and 15.)
- (iii) Receptor, which focuses on the human and ecological populations that may be impacted by the presence of CWM. It has the data elements Population Density, Population Near Hazard, Types of Activities/Structures, and Ecological and/or Cultural Resources and constitutes 20 percent of the CHE score. (See appendix A, tables 16, 17, 18, and 19.)
- (2) Similar to the EHE module, each data element is assigned a numeric score, and the sum of these scores (i.e., the CHE module score) is used to determine the CHE rating. The CHE module score results in an MRS being placed

- into one of the following ratings. (See appendix A, table 20.)
- (i) CHE Rating A (Highest) is assigned to MRSs with a CHE score from 92 to 100.
- (ii) CHE Rating B is assigned to MRSs with a CHE score from 82 to 91.
- (iii) CHE Rating C is assigned to MRSs with a CHE score from 71 to 81.
- (iv) CHE Rating D is assigned to MRSs with a CHE score from 60 to 70.
- (v)  $CHE\ Rating\ E$  is assigned to MRSs with a CHE score from 48 to 59.
- (vi) CHE Rating F is assigned to MRSs with a CHE score from 38 to 47.
- (vii)  $\it{CHE}$   $\it{Rating}$   $\it{G}$  ( $\it{Lowest}$ ) is assigned to MRSs with a CHE score less than 38.
- (3) There are also three other potential outcomes for the CHE module:
- (i) Evaluation pending. This category is used when there are known or suspected CWM, but sufficient information is not available to populate the nine data elements of the CHE module.
- (ii) No longer required. This category is reserved for MRSs that no longer require an assigned priority because the Department has conducted a response, all objectives set out in the decision document for the MRS have been achieved, and no further action, except for long-term management and recurring reviews, is required.
- (iii) No known or suspected CWM hazard. This category is reserved for MRSs that do not require evaluation under the CHE module.
- (4) The CHE rating shall be considered with the EHE module and HHE module ratings to determine the MRS priority.
- (5) MRSs lacking information for assessing a CHE module rating shall be programmed for additional study and evaluated as soon as sufficient data are available. Until a CHE module rating is assigned, the MRS shall be rated as "evaluation pending" for the CHE module.
- (c) Health Hazard Evaluation (HHE) module.
- (1) The HHE provides a consistent Department-wide approach for evaluating the relative risk to human health and the environment posed by MC. The HHE builds on the RRSE framework that is used in the Installation Restoration Program (IRP) and has been

modified to address the unique requirements of MRSs. The HHE module shall be used for evaluating the potential hazards posed by MC and other chemical contaminants. The HHE module is intended to evaluate MC at sites. Any incidental nonmunitions-related contaminants may be addressed incidental to a munitions response under the MMRP.

- (2) The module has three factors:
- (i) Contamination Hazard Factor (CHF), which indicates MC, and any nonmunitions-related incidental contaminants present; this factor contributes a level of High (H), Middle (M), or Low (L) based on Significant, Moderate, or Minimal contaminants present, respectively. (See appendix A to this part, table 21.)
- (ii) Receptor Factor (RF), which indicates the receptors; this factor contributes a level of H, M, or L based on Identified, Potential, or Limited receptors, respectively. (See appendix A, table 21.)
- (iii) Migration Pathway Factor (MPF), which indicates environmental migration pathways, and contributes a level of H, M, or L based on Evident, Potential or Confined pathways, respectively. (See appendix A, table 21.)
- (3) The H, M, and L levels for the CHF, RF, and MPF are combined in a matrix to obtain composite three-letter combination levels that integrate considerations of all three factors. (See appendix A, table 22.)
- (4) The three-letter combination levels are organized by frequency, and the resulting frequencies result in seven HHE ratings. (See appendix A, table 23.)
- (i) HHE Rating A (Highest) is assigned to MRSs with an HHE combination level of high for all three factors.
- (ii) HHE Rating B is assigned to MRSs with a combination level of high for CHF and RF and medium for MPF (HHM).
- (iii) HHE Rating C is assigned to MRSs with a combination level of high for the CHF and RF and low for MPF (HHL), or high for CHF and medium for the RF and MPF (HMM).
- (iv) HHE Rating D is assigned to MRSs with a combination level of high for the CHF, medium for the RF, and low for the MPF (HML), or medium for all three factors (MMM).

- (v) HHE Rating E is assigned to MRSs with a combination level of high for the CHF and low for the RF and MPF (HLL), or medium for the CHF and RF and low for the MPF (MML).
- (vi) HHE Rating F is assigned to MRSs with a combination level of medium for the CHF and low for the RF and MPF (MLL).
- (vii) HHE Rating G (Lowest) is assigned to MRSs with a combination level of low for all three factors (LLL).
- (5) The HHE three-letter combinations are replaced by the seven HHE ratings. (See appendix A, table 24.)
- (6) There are also three other potential outcomes for the HHE module:
- (i) Evaluation pending. This category is used when there are known or suspected MC, and any incidental non-munitions-related contaminants present, but sufficient information is not available to determine the HHE module rating.
- (ii) No longer required. This category is reserved for MRSs that no longer require an assigned MRS priority because the Department has conducted a response, all objectives set out in the decision document for the MRS have been achieved, and no further action, except for long-term management and recurring reviews, is required.
- (iii) No known or suspected munitions constituent hazard. This rating is reserved for MRSs that do not require evaluation under the HHE module.
- (7) The HHE module rating shall be considered with the EHE and CHE module ratings to determine the MRS priority.
- (8) MRSs lacking information sufficient for assessing an HHE module rating shall be programmed for additional study and evaluated as soon as sufficient data are available. Until an HHR module rating is assigned, the MRS shall be classified as "evaluation pending" for the HHE module.
- (d) Determining the MRS priority. (1) An MRS priority is determined based on integrating the ratings from the EHE, CHE, and HHE modules. Until all three hazard evaluation modules have been evaluated, the MRS priority shall be based on the results of the modules completed.

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- (2) Each MRS is assigned to one of eight MRS priorities based on the ratings of the three hazard evaluation modules, where Priority 1 indicates the highest potential hazard and Priority 8 the lowest potential hazard. Under the rule in this part, only MRSs with CWM can be assigned to Priority 1 and no MRS with CWM can be assigned to Priority 8. (See appendix A to this part, table 25.)
- (3) An "evaluation pending" rating is used to indicate that an MRS requires further evaluation. This designation is only used when none of the three modules has a numerical rating (i.e., 1 through 8) and at least one module is rated "evaluation pending." The Department shall develop program metrics focused on reducing the number of MRSs with a status of "evaluating pending" for any of the three modules. (See appendix A, table 25.)
- (4) A "no longer required" rating is used to indicate that an MRS no longer requires prioritization. The MRS will receive this rating when none of the three modules has a numerical (i.e., 1 through 8) or an "evaluation pending" designation, and at least one of the modules is rated "no longer required."
- (5) A rating of "no known or suspected hazard" is used to indicate that an MRS has no known or expected hazard. This designation is used only when the hazard evaluation modules are rated as "no known or suspected explosive hazard," "no known or suspected CWM hazard," and "no known or suspected MC hazard." (See appendix A, table 25.)

## §179.7 Sequencing.

(a) Sequencing considerations. The sequencing of MRSs for action shall be based primarily on the MRS priority determined through applying the rule in this part. Generally, an MRS that presents a greater relative risk to human health, safety, or the environment will be addressed before an MRS that presents a lesser relative risk. Other factors, however, may warrant consideration when determining the sequencing for specific MRSs. In evaluating other factors in sequencing decisions, the Department will consider a broad range of issues. These other, or risk-plus factors, do not influence or

- change the MRS priority, but may influence the sequencing for action. Examples of factors that the Department may consider are:
- (1) Concerns expressed by regulators or stakeholders.
  - (2) Cultural and social factors.
- (3) Economic factors, including economic considerations pertaining to environmental justice issues, economies of scale, evaluation of total life cycle costs, and estimated valuations of long-term liabilities.
- (4) Findings of health, safety, or ecological risk assessments or evaluations based on MRS-specific data.
- (5) Reasonably anticipated future land use, especially when planning response actions, conducting evaluations of response alternatives, or establishing specific response action objectives.
- (6) A community's reuse requirements at Base Realignment and Closure (BRAC) installations.
- (7) Specialized considerations of tribal trust lands (held in trust by the United States for the benefit of any tribe or individual). The United States holds the legal title to the land and the tribe holds the beneficial interest.
- (8) Implementation and execution considerations (e.g., funding availability; the availability of the necessary equipment and people to implement a particular action; examination of alternatives to responses that entail significant capital investments, a lengthy period of operation, or costly maintenance; alternatives to removal or treatment of contamination when existing technology cannot achieve established standards [e.g., maximum contaminant levels]).
  - (9) Mission-driven requirements.
- (10) The availability of appropriate technology (e.g., technology to detect, discriminate, recover, and destroy UXO).
- (11) Implementing standing commitments, including those in formal agreements with regulatory agencies, requirements for continuation of remedial action operations until response objectives are met, other long-term management activities, and program administration.
- (12) Established program goals and initiatives.